

In the Claims

1. (withdrawn) A device for medical video recording comprising:

an endoscope;

a digital media; and

an imager in communication with said endoscope, said imager converting energy received from said endoscope to signals that are contemporaneously stored onto said digital media.
2. (withdrawn) The device of claim 1 further comprising an encoder in communication with said imager, said encoder compressing said signals.
3. (withdrawn) The device of claim 1 wherein said media is an optical disc.
4. (withdrawn) The device of claim 3 wherein said media is a digital versatile disk.
5. (withdrawn) The device of claim 4 wherein said stored signals are stored as VOB files.
6. (withdrawn) The device of claim 2 wherein said encoder is an MPEG encoder.
7. (withdrawn) The device of claim 1 wherein said imager is a solid state device.

8. (withdrawn) The device of claim 1 wherein said imager includes a still frame grabber.
9. (withdrawn) The device of claim 8 wherein said imager stores still frames on said media.
10. (withdrawn) The device of claim 1 further including a touch screen for entering control commands for said imager and said endoscope and said touchscreen is responsive to a touch by a user.
11. (withdrawn) The device of claim 10 further including a housing, said housing enclosing said imager.
12. (withdrawn) The device of claim 11 wherein said touch screen is at least partially retractable within a footprint of said housing.
13. (withdrawn) The device of claim 11 wherein the touch screen is slidable at least partially out of a footprint of said housing.
14. (withdrawn) The device of claim 11 wherein the touch screen is deflectable relative to said housing.

15. (withdrawn) The device of claim 11 wherein the touch screen is pivotable relative to said housing.

16. (withdrawn) The device of claim 10 wherein said touch screen displays said signal.

17. (withdrawn) The device of claim 1 wherein said signal is electromagnetic energy.

18. (withdrawn) The device of claim 1 wherein said signal is direct current energy.

19. (currently amended) A medical video instrument having touch screen control comprising:

a touch screen for entering control commands to control said medical video instrument;

said medical video instrument inserted into a body cavity and generating an image stream representative of the body cavity and ~~for~~ displayed on said touch screen;

a processor for receiving said control commands and for generating control signals to operate said medical video instrument; and

a housing for enclosing said processor, ~~[[;]]~~ said touch screen movable between a first position at least partially within a footprint of said housing and a second position extended from said footprint of said housing.

20. (original) The medical instrument of claim 19 in which said touch screen is unpluggable from said housing.

21. (original) The medical instrument of claim 19 in which said housing and said touch screen include stackable mating plug portions.

22. (original) The medical instrument of claim 20 in which said touch screen can be used by a plurality of medical instruments.

23. (original) The medical instrument of claim 19 in which said touch screen is deflectable about an axis of said housing.

24. (original) The medical instrument of claim 23 in which said touch screen is easier to deflect in one direction than in the other direction.

25. (original) The medical instrument of claim 23 in which said touch screen is more difficult to deflect in the opening direction than in the closing direction to permit said touch screen to be tapped without unintentionally deflecting said touch screen.

26. (original) The medical instrument of claim 19 in which said touch screen presents a keyboard to a user.

27. (original) The medical instrument of claim 19 further comprising a sensor in communication with said processor, said sensor receiving control signals to operate said medical instrument.

28. (original) The medical instrument of claim 19 further comprising a speech recognition module executing on said processor, said speech recognition module receiving voice signals that control said medical instrument.

29. (original) The medical instrument of claim 19 further comprising a expert system executing on said processor, said expert system generating control signals to operate said medical instrument.

30. (original) The medical instrument of claim 19 in which said touch screen slides out of said housing.

31. (original) The medical instrument of claim 19 in which said touch screen slides out of said housing and is deflectable.

32. (withdrawn) A video recording and image capture device for recording data comprising:

a main board;

a first and second bus in communication with said main board;

an interface operable to receive a signal and forward the signal to said first bus;

an imager in communication with said main board, said imager recording said signal while contemporaneously writing said signal, said imager operably connected to said second bus; and

a touch screen connected to said second bus and responsive to a touch by a user, said touch screen for entering control commands for said interface.

33. (withdrawn) The device of claim 32 wherein said interface is operable to receive and process said signal into an MPEG stream, said interface connected on said first bus to the main board.

34. (withdrawn) The device of claim 32 and 33 wherein said imager records and writes said files as an MPEG stream.

35. (withdrawn) The device of claim 32 further comprising a database module executing on said main board, said database module structuring storage of said files.

36. (withdrawn) The device of claim 32 further comprising a sensor in communication with said main board, said sensor generating control signals to operate said device.

37. (withdrawn) The device of claim 32 further comprising a speech recognition module executing on said main board, said speech recognition module generating control signals to operate the device.

38. (withdrawn) The device of claim 32 further comprising an expert system executing on said main board, said expert system generating control signals to operate said device.

39. (withdrawn) The device of claim 32 further comprising a stereoscopic module executing on said main board, said stereoscopic module associating a plurality of files to provide stereoscopic images on said interface.

40. (withdrawn) The device of claim 32 wherein said interface comprises at least one relay to route an input signal to a corresponding output connector for providing an output signal regardless of the operation status of said device.

41. (withdrawn) An interface for processing a signal for recording video into a multiple frame layer comprising:

- a controller for an inter-ic bus for providing a multiple master digital connection;
- an analog to digital converter for converting a video signal to a first digital stream, said converter operably connected to said inter-ic bus;

a video compression and decompression integrated circuit for encoding said first digital stream into a second digital stream having frames, and decoding said second digital stream, said video compression and decompression integrated circuit operably connected to said inter-ic bus; and

a programmable buffer for selectively saving frames handled by said controller, said buffer operably connected to said controller and said video compression and decompression integrated circuit, and said buffer inserting said frames into said second digital stream for decoding.

42. (withdrawn) A method for recording an MPEG file for documenting surgical procedures while displaying an MPEG stream and a plurality of selected still image files corresponding to the MPEG stream, comprising the steps of:

- providing a first digital data stream comprising a video signal,
- providing a second digital data stream comprising an audio signal,
- multiplexing an MPEG data stream from said first and second digital data stream,
- streaming said MPEG data stream to an imager operably connected on a bus;
- writing said MPEG stream to said imager;
- displaying said MPEG stream on a display unit;
- selecting a number of frames from said MPEG stream;
- converting the frames to still image files; and
- multiplexing a signal to said display unit by adding the still image files.

43. (withdrawn) The method of claim 42 in which said still image files are in JPEG format.

44. (withdrawn) The method of claim 42 in which said still image files are in BMP format.

45. (withdrawn) The method of claim 4 in which the still image files are in TIFF format.

46. (previously presented) The medical video instrument according to Claim 19 wherein said medical video instrument generates video data that is displayed on said touch screen.

47. (previously presented) The medical video instrument according to Claim 19 further comprising a video screen coupled to said processor, and wherein said medical video instrument generates video data that is displayed on said video screen.

48. (previously presented) The medical video instrument according to Claim 19 wherein said medical video instrument further comprises a storage for storing the image stream.